## PATENT COOPERATION TREATY

| From the INTERNATIONAL SEARCHING AUTHORITY                                                                                                                                                                                                                                                                                                                                                                                                                                   | . PCT                                                                                                                                                        |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| To:  KILPATRICK STOCKTON LLP Attn. Gardner, J. Steven 1001 West Fourth Street Winston-Salem, NC27101-2400 UNITED STATES OF AMERICA                                                                                                                                                                                                                                                                                                                                           | NOTIFICATION OF TRANSMITTAL OF<br>THE INTERNATIONAL SEARCH REPORT AND<br>THE WRITTEN OPINION OF THE INTERNATIONAL<br>SEARCHING AUTHORITY, OR THE DECLARATION |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | (PCT Rule 44.1)                                                                                                                                              |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Date of mailing (day/month/year) 19/01/2005                                                                                                                  |  |  |  |  |
| Applicant's or agent's the reterence                                                                                                                                                                                                                                                                                                                                                                                                                                         | FOR FURTHER ACTION See paragraphs 1 and 4 below                                                                                                              |  |  |  |  |
| GP-133-00PCT                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                              |  |  |  |  |
| International application No. PCT/US2004/029615                                                                                                                                                                                                                                                                                                                                                                                                                              | International filing date (day/month/year) 10/09/2004                                                                                                        |  |  |  |  |
| Applicant                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                              |  |  |  |  |
| GOOGLE INC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                              |  |  |  |  |
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                              |  |  |  |  |
| Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filled if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices. |                                                                                                                                                              |  |  |  |  |
| In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months.                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |  |  |  |
| See the Annex to Form PCT/IB/301 and, for details about the ap Guide, Volume II, National Chapters and the WIPO Internet site                                                                                                                                                                                                                                                                                                                                                | plicable time limits, Office by Office, see the PCT Applicant's .                                                                                            |  |  |  |  |
| Name and mailing address of the International Searching Authority  European Patent Office, P.B. 5818 Patentlaan 2  NL-2280 HV Rijswijk  Tel. (+31-70) 340-2040. Tx. 31 651 epo nl.  Fax: (+31-70) 340-3016                                                                                                                                                                                                                                                                   | Authorized officer  Marja Brouwers                                                                                                                           |  |  |  |  |
| Form PCT/(\$A/220 / January 2004)                                                                                                                                                                                                                                                                                                                                                                                                                                            | (See notes on accompanying sheet)                                                                                                                            |  |  |  |  |

### NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty, in case of discorpsorpy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

## INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international pretininery examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international physication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### Where not to file the amondments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by emending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabio numerals. Where a claim is cancelled, no renumbering of the other claims is required, in all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Saction 205(b)).

The amondments must be made in the language in which the international application is to be published.

## What documents must/may accompany the amendments?

Letter (Section 205(b))

The amendments must be submitted with a letter,

The letter will not be published with the international application and the amended claims, it should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the tanguage of the international application is French, the letter must be in French.

Notes to Form PCT/ISA/220 (first sheet) (January 1994)

#### NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
  "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- 3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]: "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added," or "Claims 7 to 13 cancelled; new claims 15,16 and 17 added; all other claims unchanged."
- [Where various kinds of amendments are made]:
   \*Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added.\*

### "Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

#### Consequence if a demand for international proliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Bulle 62.2(a), first sentence).

## Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Cuirte.

Notes to Form PCT/ISA/220 (second sheet) (January 1994)

## PATENT COOPERATION TREATY

## **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference  GP-133-00PCT                                        | FOR FURTHER ACTION                                                                                               |                       | ee Form PCT/ISA/220<br>where applicable, Item 5 below.                                |  |  |  |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------|--|--|--|
| International application No.                                                              | International filing date (day/monti                                                                             | vyear) (              | Earliest) Priority Date (day/month/year)                                              |  |  |  |
| PCT 'US2004/029615 10/09/2004 12/09/2003                                                   |                                                                                                                  |                       |                                                                                       |  |  |  |
| Applicant                                                                                  |                                                                                                                  |                       |                                                                                       |  |  |  |
| This International Search Report has be according to Article 18. A copy is being           | transmitted to the International Bureau                                                                          | J.                    | y and is transmitted to the applicant                                                 |  |  |  |
| This international Search Report consist X It is also accompanied to                       | ts of a total of shoots of a copy of each prior art document of                                                  |                       | ort.                                                                                  |  |  |  |
| Basis of the report     With regard to the language, the language in which it was filed. u | e international search was carried out<br>intess otherwise indicated under this it                               | on the basis o<br>em. | of the international application in the                                               |  |  |  |
| The internation this Authority (F                                                          |                                                                                                                  | of a translatio       | n of the international application furnished to                                       |  |  |  |
| b. With regard to any nucl                                                                 | eotide and/or amino acid sequence                                                                                | disclosed in t        | he international application, see Box No. I.                                          |  |  |  |
| 2. Certain claims were fo                                                                  | ound unsearchable (See Box II).                                                                                  |                       |                                                                                       |  |  |  |
| 3. Unity of invention is la                                                                | acking (see Box III).                                                                                            |                       |                                                                                       |  |  |  |
| 4. With regard to the title,                                                               |                                                                                                                  |                       |                                                                                       |  |  |  |
|                                                                                            | submitted by the applicant.                                                                                      |                       |                                                                                       |  |  |  |
| the text has been estab                                                                    | lished by this Authority to read as folk                                                                         | JW 5.                 |                                                                                       |  |  |  |
|                                                                                            |                                                                                                                  |                       | ,                                                                                     |  |  |  |
|                                                                                            |                                                                                                                  | •                     |                                                                                       |  |  |  |
|                                                                                            |                                                                                                                  |                       |                                                                                       |  |  |  |
| 5. With regard to the abstract,                                                            |                                                                                                                  |                       |                                                                                       |  |  |  |
| the text has been estat                                                                    | submitted by the applicant,<br>dished, according to Rule 38.2(b), by<br>from the date of mailing of this interna | his Authority a       | is it appears in Box No. IV. The applicant report, submit comments to this Authority. |  |  |  |
| With regards to the drawings,                                                              |                                                                                                                  |                       |                                                                                       |  |  |  |
| a. the figure of the drawings to be published with the abstract is Figure No               |                                                                                                                  |                       |                                                                                       |  |  |  |
|                                                                                            | y the applicant.                                                                                                 |                       |                                                                                       |  |  |  |
|                                                                                            | this Authority, because the applicant t                                                                          |                       |                                                                                       |  |  |  |
|                                                                                            | this Authority, because this figure bet                                                                          | er characteriz        | es the invention.                                                                     |  |  |  |
| b. none of the figures is to                                                               | be published with the abstract.                                                                                  |                       |                                                                                       |  |  |  |

Form PCT/ISA/210 (first sheet) (January 2004)

## INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/029615

|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <del></del>                                                                                                                                                                                                                      |  |  |  |
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| A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06F17/30                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                  |  |  |  |
| According to                                                                                 | o International Patent Classification (IPC) or to both national class                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | stication and IPC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |  |  |  |
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|                                                                                              | ocumentation suarched (classification system followed by classifi<br>GOGF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | cation symbols)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                  |  |  |  |
| Liorannenta                                                                                  | tion searched other than minimum documentation to the extent th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | al such documents are included in the fields s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | earched                                                                                                                                                                                                                          |  |  |  |
| Electronic                                                                                   | late base consulted during the international search (name of data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | a base and, where practical, search terms used                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | d)                                                                                                                                                                                                                               |  |  |  |
| EPO-In                                                                                       | ternal, WPI Data, INSPEC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                  |  |  |  |
| C. DOCUM                                                                                     | ENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                  |  |  |  |
| Category *                                                                                   | Citation of document, with indication, where appropriate, of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | relevant passages                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Relevant to claim No.                                                                                                                                                                                                            |  |  |  |
| X                                                                                            | US 6 539 377 B1 (CULLISS GARY A 25 March 2003 (2003-03-25) abstract column 1, line 24 - column 1, column 2, line 25 - column 3, column 7, line 15 - column 8, column 9, line 48 - column 9, column 10, line 44 - column 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | line 59<br>line 36<br>line 39<br>line 65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1-52                                                                                                                                                                                                                             |  |  |  |
| X Fun                                                                                        | ther documents are listed in the continuation of box C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Patent family members are listed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | in annex.                                                                                                                                                                                                                        |  |  |  |
| 'A' docum consi 'E' earlier filing 'L' docum which citatic 'O' docum other 'P' docum tater t | alegories of cited documents :  nent defining like general state of the air which is not detect to be of particular relevance document but published on or after the international date on the state of | '1' later document published after the interpretation of proofly date and not in conflict will cated to understand the principle or it is executed in the cannot of particular relevance; the cannot be considered novel or cannot be considered novel or cannot be considered novel or cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an identification of the cannot be considered to involve an i | In the application but<br>leavy underlying the<br>claimed Invention<br>to considered to<br>ocurrent is taken alone<br>claimed invention<br>mention step when the<br>lone other such docu-<br>jus to a person skilled<br>t tamity |  |  |  |
| ;                                                                                            | 7 January 2005 19/01/2005                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                  |  |  |  |
| Name and                                                                                     | rnailing arkdress of the ISA<br>European Palent Office, P. B. 5818 Palentiaan 2<br>NL - 2280 HV Pajswik,<br>Tel (+31-70) 340-2040, Ts. 31 651 epo nl,<br>Fax: (+31-70) 340-3016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Authorized officer  Boyadzhiev, Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                  |  |  |  |

Form Philir SAFatu (second sheet) (January 2004)

## INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/029615

| alegory * | ation) DOCUMENTS CONSIDERED TO BE RELEVANT  Castion of document, with indication, where appropriate, of the relevant passages | Relevant to claim No.      |
|-----------|-------------------------------------------------------------------------------------------------------------------------------|----------------------------|
|           |                                                                                                                               |                            |
|           | US 2003/120654 A1 (TENG SHANGHUA ET AL)<br>26 June 2003 (2003-06-26)                                                          | 1,6,<br>10-27,<br>32,37-52 |
|           | abstract<br>page 2, paragraph 20 - page 2, paragraph<br>24                                                                    |                            |
|           | page 3, paragraph 39 — page 4, paragraph<br>59                                                                                |                            |
|           | page 5, paragraph 68 - page 6, paragraph<br>110                                                                               |                            |
|           | page 7, paragraph 123 — page 7, paragraph<br>130                                                                              |                            |
|           | US 2002/049752 A1 (BOWMAN DWAYNE ET AL)<br>25 April 2002 (2002-04-25)                                                         | 1,6,10,<br>15,27,<br>32,37 |
|           | abstract<br>page 1, paragraph 2 - page 1, paragraph 7<br>page 1, paragraph 17 - page 2, paragraph<br>18                       |                            |
| •         | page 2, paragraph 20 - page 2, paragraph<br>21                                                                                |                            |
|           | page 4, paragraph 29 – page 4, paragraph<br>43                                                                                |                            |
|           | page 5, paragraph 47 - page 5, paragraph<br>48                                                                                |                            |
|           | page 6, paragraph 55 – page 6, paragraph<br>59                                                                                |                            |
|           | WO 01/16807 A (POWERCAST MEDIA INC)<br>8 March 2001 (2001-03-08)                                                              | 1-52                       |
|           | abstract<br>page 2, line 6 - page 4, line 17                                                                                  |                            |
|           | page 8, line 4 - page 10, line 13                                                                                             |                            |
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Firm PCT1SA/210 (continuation of second sheet) (January 2004)

page 2 of 2



## INTERNATIONAL SEARCH REPORT

Information on patent family members

triternational Application No PCT/US2004/029615

| Patent document<br>cited in search report |    | Publication Patent family date member(s) |    | Publication date |            |
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Form PCT1SA(210 (patent tomity annies) (January 2004)

## PATENT COOPERATION TREATY

| rom the<br>NTERNATIONAL SEAR                       | CHING AUTHORITY                                                                                        |                            |                                                                                      |                                                                                                                                            |  |  |  |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| To:                                                | . "                                                                                                    |                            |                                                                                      | PCT                                                                                                                                        |  |  |  |
| see form PCT/ISA/220                               |                                                                                                        |                            | WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43 <i>bis</i> .1) |                                                                                                                                            |  |  |  |
|                                                    |                                                                                                        |                            | Date of mailing (day/month/year)                                                     | see form PCT4SA210 (second sheet)                                                                                                          |  |  |  |
| Applicant's or agent's file of see form PCT/ISA/22 |                                                                                                        | ·                          | FOR FURTHER ACTION See paragraph 2 below                                             |                                                                                                                                            |  |  |  |
| International application N<br>PCT/US2004/029615   | -                                                                                                      |                            | l<br>lay:month:year)                                                                 | Priority date (day/month/year)<br>12.09.2003                                                                                               |  |  |  |
| International Patent Classi<br>G06F17/30           | , I ,<br>ification (IPC) or both national c                                                            | lassification :            | and IPC                                                                              | 1                                                                                                                                          |  |  |  |
| Applicant GOOGLE INC.                              |                                                                                                        |                            |                                                                                      |                                                                                                                                            |  |  |  |
| . This patients are                                |                                                                                                        |                            |                                                                                      |                                                                                                                                            |  |  |  |
| · ·                                                | ntains indications relating                                                                            | to the foli                | owing items:                                                                         |                                                                                                                                            |  |  |  |
| ☑ Box No I<br>☑ Box No, II                         | Basis of the opinion<br>Priority                                                                       |                            |                                                                                      |                                                                                                                                            |  |  |  |
| ☐ Box No. III                                      | •                                                                                                      | on with rega               | ard to novelty, inve                                                                 | entive step and industrial applicability                                                                                                   |  |  |  |
| Box No. IV                                         | Lack of unity of invention                                                                             |                            |                                                                                      |                                                                                                                                            |  |  |  |
| Box No. V                                          | Reasoned statement under applicability; citations and e                                                |                            |                                                                                      | d to novelty, inventive step or industrial statement                                                                                       |  |  |  |
| ☐ Box No. VI                                       | Certain documents cited                                                                                |                            | oopponing com                                                                        |                                                                                                                                            |  |  |  |
| ☐ Box No. VII                                      | Certain defects in the intern                                                                          | ational app                | application                                                                          |                                                                                                                                            |  |  |  |
| ☐ Box No. VIII                                     | Certain observations on the                                                                            | internation                | al application                                                                       |                                                                                                                                            |  |  |  |
| 2. FURTHER ACTIO                                   | ON                                                                                                     |                            |                                                                                      |                                                                                                                                            |  |  |  |
| written opinion of<br>the applicant cho            | the International Preliminar<br>loses an Authority other than<br>eau under Rule 66.1 <i>bis</i> (b) th | y Examining<br>this one to | g Authority ("IPEA<br>be the IPEA and                                                | will usually be considered to be a  (*). However, this does not apply where the chosen IPEA has notifed the ernational Searching Authority |  |  |  |
| submit to the IPE                                  | A a written reply together, was date of mailing of Form PCT                                            | rhere appro                | priate, with amend                                                                   | the IPEA, the applicant is invited to<br>dments, before the expiration of three<br>tion of 22 months from the priority date,               |  |  |  |
| For further option                                 | ns, see Form PCT/ISA/220.                                                                              |                            |                                                                                      |                                                                                                                                            |  |  |  |
| 3. For further details                             | s, see notes to Form PCT/IS                                                                            | A/220.                     |                                                                                      |                                                                                                                                            |  |  |  |
|                                                    |                                                                                                        |                            |                                                                                      | •.                                                                                                                                         |  |  |  |
| Name and mailing address                           | is of the ISA:                                                                                         |                            | Authorized Office                                                                    | it                                                                                                                                         |  |  |  |
| ML-2280 H                                          | Patent Office - P.B. 5818 Patent<br>V Rijswijk - Pays Bas<br>0 340 - 2040 Tx: 31 651 epo nl            | tlaan 2                    | Boyadzhiev,                                                                          | \ <b>9</b> '                                                                                                                               |  |  |  |
| Fax: +31 7                                         | 0 340 - 3016                                                                                           |                            | Telephone No. +                                                                      |                                                                                                                                            |  |  |  |

Form (PCT/ISA/237) (Cover Sheet) (January 2004)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/029615

| _  | Box I                                                                                                                                                                                                                | lo. I Basis of the opinion                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| 1. |                                                                                                                                                                                                                      | regard to the language, this opinion has been established on the basis of the international application in<br>nguage in which it was filed, unless otherwise indicated under this item.                                                                                                                                                                                   |  |  |  |  |  |
|    | la                                                                                                                                                                                                                   | his opinion has been established on the basis of a translation from the original language into the following<br>anguage , which is the language of a translation furnished for the purposes of international search<br>under Rules 12.3 and 23.1(b)).                                                                                                                     |  |  |  |  |  |
| 2. | <ol><li>With regard to any nucleotide and/or amino acid sequence disclosed in the international application and<br/>necessary to the claimed invention, this opinion has been established on the basis of:</li></ol> |                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |
|    | a. type of material:                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |
|    | O                                                                                                                                                                                                                    | a sequence listing                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
|    |                                                                                                                                                                                                                      | table(s) related to the sequence listing                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |
|    | b. for                                                                                                                                                                                                               | mat of material:                                                                                                                                                                                                                                                                                                                                                          |  |  |  |  |  |
|    |                                                                                                                                                                                                                      | in written format                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |
|    |                                                                                                                                                                                                                      | in computer readable form                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |
|    | c. tim                                                                                                                                                                                                               | e of filling/furnishing:                                                                                                                                                                                                                                                                                                                                                  |  |  |  |  |  |
|    | O                                                                                                                                                                                                                    | contained in the international application as filed.                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
|    |                                                                                                                                                                                                                      | filed together with the international application in computer readable form.                                                                                                                                                                                                                                                                                              |  |  |  |  |  |
|    |                                                                                                                                                                                                                      | furnished subsequently to this Authority for the purposes of search.                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
| 3. | 1                                                                                                                                                                                                                    | n addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto<br>has been filed or furnished, the required statements that the information in the subsequent or additional<br>topies is identical to that in the application as filed or does not go beyond the application as filed, as<br>appropriate, were furnished. |  |  |  |  |  |
| 4. | Addıt                                                                                                                                                                                                                | ional comments:                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/029615

| Во                                                                                                            | x No. II                                                                                                                                                                                                                                                                                                                  | Priority                                   |         |             |                                                                                 |  |  |  |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|---------|-------------|---------------------------------------------------------------------------------|--|--|--|
| 1. ① The following document has not been furnished:                                                           |                                                                                                                                                                                                                                                                                                                           |                                            |         |             |                                                                                 |  |  |  |
| <ul> <li>copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)</li> </ul> |                                                                                                                                                                                                                                                                                                                           |                                            |         |             |                                                                                 |  |  |  |
|                                                                                                               | translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).                                                                                                                                                                                                                        |                                            |         |             |                                                                                 |  |  |  |
|                                                                                                               | Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.                                                                                                               |                                            |         |             |                                                                                 |  |  |  |
| 2. 🖸                                                                                                          | This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43 <i>bis.</i> 1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.                        |                                            |         |             |                                                                                 |  |  |  |
| 3. 🗖                                                                                                          | It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date. |                                            |         |             |                                                                                 |  |  |  |
| 4. Add                                                                                                        | ditional d                                                                                                                                                                                                                                                                                                                | observations, if necess                    | sary:   |             |                                                                                 |  |  |  |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                           |                                            |         |             |                                                                                 |  |  |  |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                           |                                            |         |             |                                                                                 |  |  |  |
|                                                                                                               | x No. V<br>Iustrial                                                                                                                                                                                                                                                                                                       | Reasoned statement applicability; citation | ent und | er Rule 43/ | bis.1(a)(i) with regard to novelty, inventive step or supporting such statement |  |  |  |
| 1. Sta                                                                                                        | itement                                                                                                                                                                                                                                                                                                                   |                                            |         |             |                                                                                 |  |  |  |
| No                                                                                                            | velty (N)                                                                                                                                                                                                                                                                                                                 | 1                                          | Yes:    | Claims      |                                                                                 |  |  |  |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                           |                                            | No:     |             | 1-7,10,17,22-24,27-33,36,43,48-50                                               |  |  |  |
| Inv                                                                                                           | entive s                                                                                                                                                                                                                                                                                                                  | tep (IS)                                   | Yes:    | Claims      | •                                                                               |  |  |  |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                           |                                            | No:     | Claims      | 8.9.11-16,18-21,25,26,34,35,37-42,44-47,51,52                                   |  |  |  |
| Ind                                                                                                           | lustrial a                                                                                                                                                                                                                                                                                                                | pplicability (IA)                          | Yes:    | Claims      | 1-52                                                                            |  |  |  |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                           |                                            | No:     | Claims      |                                                                                 |  |  |  |
|                                                                                                               |                                                                                                                                                                                                                                                                                                                           |                                            |         |             |                                                                                 |  |  |  |
| 2. Cita                                                                                                       | ations a                                                                                                                                                                                                                                                                                                                  | nd explanations                            |         |             |                                                                                 |  |  |  |

Form PCT4SA/237 (January 2004)

see separate sheet

### Re Item V.

1. The following documents are referred to in this communication:

D1: US 6 539 377 B1 (CULLISS GARY A) 25 March 2003 (2003-03-25)

D2: US 2003/120654 A1 (TENG SHANGHUA ET AL) 26 June 2003 (2003-06-26)
D3: US 2002/049752 A1 (BOWMAN DWAYNE ET AL) 25 April 2002 (2002-04-25)

## Objections under Article 33(2) PCT

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-7,10,17,22-24 is not new in the sense of Article 33(2) PCT.

### **INDEPENDENT CLAIM 1**

2.1 Document D1 discloses :

A method comprising (column 1 lines 25-28, "The present ... searchers."):

- (a) receiving a search query (column 2 lines 40 and 41, "As described ... a user ...");
- (b) determining a first related query to the search query (column 9 lines 48 and 49, "In addition ... queries...");
- (c) determining a first article associated with the search query (column 1 lines 44-46,
- "Accordingly ... information" and column 2 lines 40-43, "As ... scores.");
- (d) determining a first ranking score for the first article based at least in part on data associated with the first related query (column 10 lines 44-50, "Personalized ... scores." and column 11 lines 9-13, "It is ... queries.")

Since D1 discloses a method comprising all the steps of claim 1 in combination, therefore the subject-matter of claim 1 lacks novelty.

### **DEPENDENT CLAIMS**

- 2.2 The subject-matter of claims 2-5 is not new because D1 discloses that the data associated with the related query comprises a total selection or instance scores (column 7 lines 24-39, "The previous ... characteristics.").
- 2.3 The subject-matter of claims 6,7,10,17 is not new because D1 discloses that articles have selection scores and scores based on the number times they were displayed to a user (column 2 lines 44-47, "Articles ... the article, etc.").

Form PCT/Separate Sheet/237 (Sheet 1) (EPO-January 2004)



2.4 The subject-matter of claims 22-24 is not new because D1 discloses that the ranking process is performed for plurality of articles displayed in the search results (column 10 lines 59-61, "Displaying ... score.").

## Objections under Article 33(3) PCT

- 3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 8,9,11-16,18-21,25,26 does not involve an inventive step in the sense of Article 33(3) PCT.
- 3.1 The additional technical features of dependent claims 8,9,11-16,18-21,25,26 represent only implementation details and do not contain any features which in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect to inventive step.
- 4. The subject-matter of claims 27-52 corresponds in terms of a computer readable medium comprising a computer program product features to the that of claims 1-26. The objections raised in respect to claims 1-26, therefore, also apply, mutatis mutandis, to the corresponding claims 27-52.
- 5. The attention of the applicant is drawn to the fact that documents D2 and D3 cited in the international search report are regarded as very relevant state of the art in the sens of Article 33(2) and/or Article 33(3) PCT (D2 for claims 1,6,10-27,32,37-52 and D3 for claims 1,6,10,15,27,32,37).